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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,189	06/08/2006	Kasinath Nayak	4717	1602

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EXAMINER	
THOMAS, BRENT C	
ART UNIT	PAPER NUMBER
4151	
MAIL DATE	DELIVERY MODE
03/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/582,189	NAYAK ET AL.	
	Examiner	Art Unit	
	BRENT THOMAS	4151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/08/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

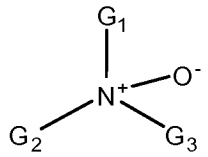
Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

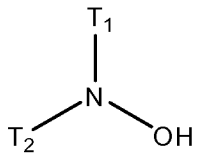
2. Claims 1-4, 6-11, 13, 14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by King et al. (U.S. Pg Pub 2002/0086924 A1 hereafter King).

3. With regard to claims 1, 2, and 10 King (paragraphs 1-22, 35-38, and 43-46) teaches a polyolefin article of manufacture including blend useful as an additive in polyolefin polymers for minimizing the effects of radiation on the physical properties of said polymers, which comprises a hindered amine light stabilizer and at least one material selected from the group consisting of: i) amine oxides exemplified by the formula:



in which G1 and G2 are independently a straight or branched chain alkyl of 6 to 36 carbon atoms, aryl of 6 to 12 carbon atoms, aralkyl of 7 to 36 carbon atoms, alkaryl of 7 to 36 carbon atoms, cycloalkyl of 5 to 36 carbon atoms, alkcycloalkyl of 6 to 36 carbon atoms or cycloalkylalkyl of 6 to 36 carbon atoms;
G3 is a straight or branched chain alkyl of 1 to 36 carbon atoms, aryl of 6 to 12 carbon atoms, aralkyl of 7 to 36 carbon atoms, alkaryl of 7 to 36 carbon atoms,

cycloalkyl of 5 to 36 carbon atoms, alkcycloalkyl of 6 to 36 carbon atoms or cycloalkylalkyl of 6 to 36 carbon atoms; with the proviso that at least one of G1,G2 and G3 contains a 13 carbon-hydrogen bond; and ii) hydroxylamines exemplified by the formula:



in which T1 is a straight or branched chain alkyl of 1 to 36 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, aralkyl of 7 to 9 carbon atoms, or said aralkyl substituted by one or two alkyl of 1 to 12 carbon atoms or by one or two halogen atoms and T2 can be either H or have the same meaning as T1.

4. With regard to claim 3, King (paragraph 142) teaches an olefin polymer selected from propylene homopolymers, propylene co-polymers, ethylene homopolymers, and ethylene co-polymers.

5. With regard to claim 4, King (paragraph 163) teaches Millad®3988 (a sorbitol-based clarifier, see attached product spec.) present in the amount of 2200 ppm, which is in the middle of the claimed range.

6. With regard to claim 6, King (paragraph 143, 145, 146) teaches inorganic nucleators present in any amount between .01 % and 10 % by weight which is equivalent to 100 to 100,000 ppm by weight, which encompasses the claimed range.

7. With regard to claims 7 and 13, King (paragraphs 34, 60) teaches amine oxide from .01 % to .5 % by weight and hindered amine light stabilizer from .01 to

1% by weight. This would yield a ratio of amine oxide to hindered amine light stabilizer of 1:0.01 to 1:5, which encompasses the claimed range.

8. With regard to claim 8 and 14, King (paragraphs 34, 60) teaches hydroxyl amines from .01 % to .5 % by weight and hindered amine light stabilizers from .01 to 1% by weight. This would yield a ratio of hydroxyl amine to hindered amine light stabilizer of 1:0.01 to 1:5, which encompasses the claimed range.

9. With regard to claims 9 and 16, King (paragraphs 143 and 145) lists acid scavengers (also know as neutralizers), including metallic stearates and hydrotalcites, as additives that can further comprise the composition.

10. With regard to claim 11, King (paragraphs 15-23) teaches a sterilized article of manufacture exposed to gamma radiation.

11. With regard to claim 17, King (paragraph 132) lists example articles of manufacture including syringes and labware.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over King.

14. With regard to claim 15, King (paragraphs 34, 60, and 122) teach different components of the blend in weight percent ranges (0.1% to 1%, 0.01% to 0.5%, and 0.05% to 0.5%), that add up to 0.16% to 2% by weight, which is equivalent to 1,600 to 20,000 ppm by weight. This overlaps the claimed range and it would have been obvious to one of ordinary skill in the art at the time the invention was made to so include as one would have expected them to have the same properties, absent a showing to the contrary.

15. With regard to claim 18, King (paragraph 134) teaches exposing a polyolefin article to .5 to 10 megarads of gamma radiation. This encompasses the claimed range and it would have been obvious to one of ordinary skill in the art at the time the invention was made to so include as one would have expected them to have the same properties, absent a showing to the contrary.

16. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over King as applied to claim 2 above, and further in view of Minami et al. (U.S. patent 6734,270 B1 hereafter Minami).

17. With regard to claim 5, King (paragraph 162) teaches a clarifier present in the amount of 2200 ppm.

18. King does not teach the type of clarifier used.

19. In the same field of endeavor, Minami (col. 21 lines 14-42) teaches inorganic nucleating agents (which can also be used as clarifiers).

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to try inorganic clarifiers for the benefit of reducing the odor from the clarifier (Minami col. 21 lines 14-15).

21. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over King as applied to claim 11 above, and further in view of Scott et al. (U.S. patent 6,333,382 B1 hereafter Scott).

22. With regard to claim 12, King (paragraph 141) teaches an article made of co-polymers of propylene and ethylene. King is silent on the weight percentage of ethylene in the copolymer.

23. In the same field of endeavor, Scott (col. 1 lines 9-11) teaches random co-polymers of propylene and ethylene, which random co-polymers contain between 0.5% to about 6% of ethylene by weight.

24. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the article of King with the co-polymers of propylene and ethylene from Scott for the benefit of improved clarity (Scott col. 1 lines 11-13.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Millad®3988 (a sorbitol-based clarifier, see attached product spec.).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRENT THOMAS whose telephone number is (571)270-7737. The examiner can normally be reached on Monday - Thursday, 7:30am-5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Ortiz can be reached on (571)272-1206. The fax

phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BT

/Angela Ortiz/
Supervisory Patent Examiner, Art Unit 4151